

Douglas

Speckled

Mountain

Serviceberries Rosaceae

Alder /

Alder

Alaska

Water

Birch

Gray

Birch

Alternate

Dogwood

Staghorn

Sumac

Showy

Mountain Ash

Mountain Ash

/ American

Sitka

Ash

Mountain

Western

Common

Ohio

Buckeye

Cherry

Eastern

White

Cedar

Common

Thornless

Honey

Locust

Red

Pine

Spruce

Lodgepole

Common

Ironwood,

Hophorn-

beam

Balsam

Poplar

Subalpine

Fir

Black

Spruce

Jack Pine

Mountain

Hemlock

Common

Black

Maple

Red

Maple

Sugar

Maple

Yellow

Birch

Paper

Birch

Bitternut

Hickory

American

Green Ash

Kentucky

Coffetree

Tuliptree

Quaking

Aspen

White

Bur Oak

Northern

American

Basswood

White Elm

Balsam Fir

Yellow

Tamarack,

Engelmann

White

Spruce

Sitka

Pine

Eastern

Douglas Fir Pinaceae

White

Eastern

Hemlock

Western

Hemlock

Pine

Eastern

Larch

Cedar

Red Oak

Oak

Beech

Yew

-leaf

Paper Birch

Maple

Sapindaceae

Betulaceae

Betulaceae

Betulaceae

Betulaceae

Cornaceae

Anacardiaceae

Rosaceae

Rosaceae

Taxaecea

Small medium 🗚

Family

Sapindaceae

Rosaceae

Chamaecyparis

Family

Fabaceae

Pinaceae

Pinaceae

Medium large

Family

Betulaceae

Salicaceae

Pinaceae

Pinaceae

Pinaceae

Pinaceae

Family

Sapindaceae

Sapindaceae

Sapindaceae

Betulaceae

Betulaceae

Juglandaceae

Fabaceae

Oleaceae

Fabaceae

Magnoliaceae

Plantaceae

Salicaceae

Fabaceae

Fabaceae

Fabaceae

Tiliaceae

Ulmaceae

Pinaceae

Chamecyparis

Pinaceae

Pinaceae

Pinaceae

Pinaceae

Pinaceae

Pinaceae

Pinaceae

Large

Medium •

4-6

5-8

5-8

5-8

2-4

3-6

6-9

5-8

5-6

4-6

5-8

Est.

Mature

Width (m)

6-12

8-12

3-5

Est.

Mature

Width (m)

10-30

6-10

8-10

Est.

Mature

Width (m)

5-12

8-10

4-6

6-9

3-6

Est.

Mature

Width (m)

12-16

10-15

12-16

18-22

20-45

12-15

15-20

8-12

12-15

10-15

6-9

30

21-24

18-22

9-18

20-30

9-12

4-6

9-15

7-10

5-6

8-10

6-14

5-9

8-10

8-10

1

0

4

0

Common

Form

1

1

1

Common

Form

Common

Form

Common

Form

10-12

5-8

5-8

6-8

6-12

5-8

3-5

6-9

6-9

20

Est.

Mature

Height (m)

6-12

5-8

15-18

Est.

Mature

Height (m)

10-30

20-30

24-30

Est.

Mature

Height (m)

8-12

25

30-40

8-12

9-15

Est.

Mature

Height (m)

18-22

10-20

18-20

18-22

15-20

15-20

15-20

15-20

18-22

20-30

12-15

15-25

21-24

18-22

18-24

35

15-18

25

12-24

35

12-18

55

15-25

12-24

12-20

50-80

Acer

glabrum

Alnus

incana

Amelanchier

spp.

Betula

neoakaskana

Betula

occidentalis

Betula

populifolia

Cornus

alternafolia

Rhus

typhina

Sorbus

decora/

Sorbus

americana

Sorbus

sitchensis

Taxus

brevifolia

Size Range

Botanical

Aesculus

glabra

Prunus

pensylvanica

Thuja

occidentalis

Size Range

Botanical

Gleditsia

triacanthos

f. inermis

Picea

rubens

Pinus

contorta

Size Range

Botanical

Ostrya

virginiana

Populus

balsamifera

Abies

lasiocarpa

Picea

mariana

Pinus

banksiana

Tsuga

mertensiana

Size Range

Botanical

Acer

nigrum

Acer

rubrum

Acer

saccharum

Betula

alleghaniensis

Betula

papyrifera

Carya

cordiformis

Fagus

grandifolia

Fraxinus

pennsylvanica

Gymnocladus

diocus

Liriodendron

tulipfera

Plantanus

Populus

tremuloides

Quercus

alba

Quercus

macrocarpa

Quercus

rubra

Tilia

americana

Ulmus

americana

Abies

balsamea

Chamaecyparis

nootkatensis

Larix

laricina

Picea

engelmannii

Picea

glauca

Picea

sitchensis

Pinus

ponderosa

Pinus

strobus

Pseudotsuga

menziesii

Tsuga

canadensis

Tsuga

heterophylla



adleaf

Yes

Yes

Yes

Yes

Yes

Yes

Yes

Yes

Yes

↑ Conifer

Yes

Serious

Pest/

Disease

P Broadleaf

No

Yes

♦ Conifer

Yes

Serious

Pest/

Disease

P Broadleaf

Yes

♦ Conifer

Yes

Yes

Serious

Pest/

Disease

Broadleaf

No

Yes

♦ Conifer

Yes

Yes

Yes

Yes

Serious

Pest/

Disease

Broadleaf

Yes

Yes

Yes

Yes

Yes

No

Yes

Yes

No

Yes

Yes

Yes

Yes

Yes

↑ Conifer

Yes

Yes

Yes

Yes

Yes

Yes

Yes

Yes

Yes

Shallow roots, wide spreading

Intolerant of shade. Often

appears in stream banks

Intolerant of pollution. Tolerates wide

range of conditions. Benefits from

temperatures. Shallow, suckering

Small shrubby tree, dense thickets,

Considered to have a short life

span. Cultivar 'Whitespire'

desirable. Shallow roots.

thickets are common. Shallow roots.

Plant in a wind protected location, a

great understory plant. Taproot.

Very adaptable to most growing

conditions, from poor soils to

Taproot.

drought conditions. It does not

tolerate wet soils. Thicket forming.

Understory tree. Species are difficult

to distinguish from one another.

Showy fruit is an important food

Slopes and hillsides. Useful in

Intolerant of road salt. Taproot

Plant Care

Messy fruit/plant parts. Taproot.

Short-lived tree. Grows best in cool

Susceptible to wind, snow and ice

Plant Care

Commonly planted beyond its range

due to its tolerance of drought and

alkaline soils. Look for thornless

Susceptible to windthrow. Taproot.

Plant Care

Naturally occurs in dry woodland,

understory areas. Intolerant of salt.

Tolerant species once established.

Commonly in rural areas for

shelterbelts and windbreaks

Shallow roots, weak wooded

Performs best in cold northern

summers. Shallow root system

windthrow.

climates, can be stressed by warm

benefits from mulch layer. Prone to

Susceptible to ice damage, avoid

Useful in protecting steep slopes

Plant Care

Intolerant of salt, drought, and

Chlorosis can be a problem in high

pH soils and drought conditions.

Commonly planted, intolerant of

Performs best in areas where

summers are cool. Shallow roots.

Performs best in northern climates,

stressed by hot summers. Shallow

Develops a long taproot, may make

it more challenging to transplant

Intolerant of salt, drought and wet

sites. Long lived species. Surface

Weak wood, susceptible to the

Can be planted well beyond its

Highly susceptible to ice damage,

weak wood and branch structure.

Intolerant of shady sites. Susceptible

to frost cracks. Often planted outside

of its natural range. Shallow roots.

Excessive sucker growth, highly

tolerate summer heat or pollution.

Does not tolerate wet sites, deep

Adaptable to many soils. Taproot

Intolerant of shade and competition,

Susceptible to ice damage. Surface

Heat and wind tolerant. Surface roots.

Cold hardy, does not do well in hot,

dry sites. Performs poorly in dry,

Planted widely outside its native

range as an ornamental. Taproot.

Intolerant of pollution, best in cool

moisture. Dislikes heat and drought.

climates with adequate soil

Shallow root system. Prone to

Performs best in cool climates.

Shallow roots benefit from mulch

Fire-resistant from thick bark.

clay soils. Quick to establish.

cooler climate. Taproot.

winter winds. Shallow root.

Intolerant of pollution, wet soils, salt,

Intolerant of hot, dry sites. Prefers

Intolerant of pollution, heat, drought,

urban conditions. Shelter from strong

Susceptible to forest fire damage,

windthrow. Regenerates well.

Shallow root.

exposed sites.

windthrow.

Shallow roots.

Shallow roots

Taproot.

although shade tolerant when

young. Taproot.

roots not a problem.

Shallow root.

taproot

susceptible to ice damage. Does not

Intolerant of dry sites. Taproot.

natural range. Taproot.

municipality, it is not recommended.

Emerald Ash Borer. If in your

pollution. Shallow roots.

pollution. Shallow roots

Surface roots.

roots.

roots.

Taproot.

against erosion. Shallow roots.

planting in wet sites. Prone to

windthrow. Taproot.

Shallow Root.

cultivars, shorter lived species.

Shallow root.

Taproot.

damage. Shallow root.

Intolerant of shade. Taproot.

climates and well-drained sandy soils.

streambank regeneration. Taproot.

source for wildlife.

mulch layer to moderate soil

and swamps. Shallow,

fibrous roots.

Shallow roots

root

		Shape					Growth Rate Light Expe		ight Exposure	osure				
	Size Range Medium small		dium Large	Ϊ _	SS P Broadleaf A Conifer	Round Oval	Narrow Irregula	Broa	d W M st	lulti- emmed	Slow Moderate Fast		Sun Partial shade Shade	ı
NAME		FEATURES					GROW	TH NEEDS				CARE		
NAME	e Small ••	FEATURES					GROW	TH NEEDS				CARE		

NAME		FEATURES						GR	OWTH NEED	S	CARE			
Size Ran	ge Sma	all 🙌												
Botanical	Common	Family	Est. Mature Height (m)	Est. Mature Width (m)	Common Form	Hardiness Zones	Range	Location	Light Exposure	Soil Preference	Tolerances	Plant Care	Ser Pe Dise	
V													∳ Broad	

Along streams and

Residential, parks, under

utility lines. Understory,

Wet sites, residential

Along streams and

Residential, parks,

Residential, parks, under

utility lines. Understory,

Mass plantings, for

Understory tree

Variety of sites, poor

Residential, landscape,

Location

Urban, residential and

parks, wide median,

Recently disturbed

Variety of sites, poor

landscapes, urban

Location

Urban, residential, parks,

wide median

Parks, naturalized

Open stands, mixed

Location

Residential, parks, urban

Parks, residential

Early successional tree.

Poor sites, coarse soils

Landscape tree,

residential, parks

Location

Residential, parks,

Urban, residential,

Natural, parks,

Residential, parks

Residential parks

Urban, residential,

Residential, park

Shade and street tree

Urban, residential,

Urban, residential,

Urban, residential,

Residential, parks,

sheltered locations

Residential, parkway

Residential and parks,

Residential and parks,

Residential and parks,

Urban, residential,

parks, wide median

Residential, parks, pure

Landscape tree,

Residential, parks

Slopes, streams, open

Stream flood plains, wet

sites, open stands

Pure open stands,

Residential, parks,

Residential, screening,

large landscape

Parks, residential

Open stands, mixed

stands

wide median

mixed stands

stands

Wide range of

landscapes

naturalized sites, wet

stands

sites

wide median

wide median

wide median

parks, wide median

parks, wide median

parks, wide median

residential

parks, wide median

natural landscapes

Open landscape.

Wide range of

landscapesz

stands

soils, wet soil,

sites, rivers

restricted sites

soils, wet soil

understory

naturalizing, or on steep

wide median

forest edge.

slopes

moist sites

forest edge.

Wet sites

moist sites

BC

YT NT BC

AB SK MB

ON QC NB

NS PE NL

YT NT BC

AB SK MB

ON QC NB

YT NT BC AB

SK MB ON

YT NT NV

BC AB SK

ON QC NB

NS NB PE

NL QC ON

ON QC NB

MB ON QC

NB NS PE

BC AB YT

BC AB

Range

ON QC PE

BC NT AB

SK MB ON

QC NB NS

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PE NL

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NS PE

NS PE

MB

NS PE NL

Zones 3-8

Zones 2-6

Zones 3-7

Zones 0-2

Zones 2-4

Zones 3-6

Zones 4-8

Zones 3-8

Zones 2-6

Zones 5-7

Hardiness

Zones

Zones 3-8

Zones 2-5

Zones 3-7

Hardiness

Zones

Zones 3-8

Zones 3-7

Zones 4-8

Hardiness

Zones

Zones 3-9

Zones 2-6

Zones 0-2

Zones 2-6

Zones 2-6

Hardiness

Zones

Zones 4-8

Zones 3-9

Zones 4-9

Zones 3-7

Zones 2-6

Zones 4-9

Zones 3-9

Zones 2-9

Zones 3-9

Zones 4-9

Zones 2-6

Zones 3-9

Zones 3-9

Zones 3-6

Zones 3-8

Zones 3-9

Zones 3-5

Zones 4-7

Zones 2-5

Zones 3-8

Zones 2-6

Zones 7-8

Zones 3-7

Zones 4-6

Zones 3-7

Zones 5-8

Moist,

Moist.

wet soil

well-drained

well-drained,

Acid soil, moist,

well-drained

Wet soil, bogs,

poorly drained

Moist,

Moist,

Moist,

well-drained

well-drained

well-drained

Dry soil, moist,

well-drained

well-drained

Moist, often

swamps

Moist,

well-drained

Soil

Preference

Acid soil,

well-drained

Moist, sandy

well-drained

moist,

soil.

Moist,

well-drained

Soil

Preference

Moist,

soil

well-drained

Cool, moist

Wide range of

soils, dry sites,

Soil

Preference

Moist,

Moist.

Moist.

well-drained

Acid soil, moist,

Acid soil, moist,

sandy soil,

well-drained

well-drained

Soil

Preference

Acid soil, moist,

well-drained

Acid soil,

well-drained

well-drained

Acid soil, moist,

Acid soil, moist,

well-drained

well-drained

Acid soil, moist,

well-drained

well-drained,

Deep rich soils,

well-drained

Acid soil, moist,

well-drained soil

Alkaline soil, wet

Moist,

wet soil

Moist,

Moist,

secs

Moist,

Moist.

Moist,

well-drained

well-drained

Acid soil, moist,

Moist, wet soils

Wet soil, poorly

draining soils

well-drained

well-drained

Acid soil,

Moist,

well-drained

well-drained

Acid soil,

well-drained

well-drained

well-drained

well-drained

moist,

Moist,

Moist,

Moist,

Moist.

Moist.

well-drained

well-drained

well-drained,

well-drained

well-drained,

Moist,

wet soil

moist,

Moist,

well-drained

moist.

Moist,

Light

Exposure

wet soil

well-drained soil,

well-drained

well-drained

wet sites

sites

bordering on

Moist.

Light

Exposure

Light

Exposure

Light

Exposure

Clay soil, dry sites,

occasional flooding, wet

Alkaline soil, dry sites,

Poorly drained sites

Alkaline, poor soils

Dry soil, deer

Clay soil, dry sites,

occasional drought, road

salt, black walnut toxicity

Rocky sites near water

Disturbed sites, dry sites

Urban pollution,

occasional drought

Tolerances

Alkaline soil, dry sites,

Dry sites, occasional

Dry sites, road salt

Tolerances

Alkaline soil, clay soil, dry

sites, occasional flowing,

road salt, wet sites, black

walnut toxicity

Shade tolerant.

understory tree.

areas

Wet sites, recently burned

Tolerances

Alkaline soil, dry sites

Wet sites

Variety of soils

sites

road salt

Dry sites

Dry soil

Alkaline soil, clay soil,

Alkaline soil, clay soil,

Alkaline soil, wet sites,

black walnut toxicity

Alkaline soil, clay soil,

Dry sites, occasional

Dry sites, occasional

drought, occasional

soils, wind, wet sites

flooding, road salt, poor

Urban pollution, drought

Alkaline soil, black walnut

Clay soil, occasional

Dry sites

Dry sites

flooding

Dry sites, occasional

drought, occasional

Dry sites, pollution,

Clay soil, dry sites,

occasional drought

Dry sites, road salt, poor

Wet sites, wide variety of

Shade tolerant, understory

Clay soil, occasional

Slopes, various elevations

Alkaline soil, clay soil

Wet sites, salt spray

Dry sites, ocassional

moss, bogs

Road salt

Wet sites

drought, very windfirm

Variety of sites, dry, sandy,

flooding, wet sites

flooding, road salt, wet

sites, black walnut toxicity

sites, road salt

flooding

Alkaline soil

occasional flooding, wet

black walnut toxicity

occasional flooding, wet

Occasional drought, wet

Alkaline soil, dry sites,

Tolerances

drought

occasional drought, wet

sites, black walnut toxicity

occasional drought, wet

sites, black walnut toxicity